

Serial No. **10/706,292**
Amdt. dated October 2, 2006
Reply to Office Action of July 3, 2006

Docket No. **K-0547**

REMARKS

By the present response, Applicant has submitted new claims 22-27 for consideration by the Examiner and asserts that these claims do not contain any prohibited new matter. Further, Applicant has canceled claim 3 without disclaimer. Applicant has amended the specification to correct a translation error. Applicant has amended claims 1, 2, 4-7, 10-12, 14-16 and 19-21 to further clarify the invention. Claims 1, 2 and 4-27 remain pending in this application. Reconsideration and withdrawal of the outstanding rejections and allowance of the present application are respectfully requested in view of the above amendments and the following remarks.

In the Office Action, claim 19 has been objected to because of informalities. Claim 1 has been rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 6,151,232 (Furuhashi et al.). Claims 2-9, 13 and 14 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Furuhashi et al. in view of European Patent No. 1385360 (Hachisuka et al.). Claim 15 has been rejected under 35 U.S.C. § 103(a) as being unpatentable over Furuhashi et al. in view of U.S. Patent No. 5,854,617 (Lee et al.). Claim 16 has been rejected under 35 U.S.C. § 103(a) as being unpatentable over Furuhashi et al. in view of Lee et al. and further in view of Hachisuka et al. Claims 10-12 and 19-21 have been objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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Allowable Subject Matter

Applicant thanks the Examiner for indicating that claims 10-12 and 19-21 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim Objections

Claim 19 has been objected to because of informalities. Applicant has amended this claim to further clarify the invention and respectfully requests that this rejection be withdrawn.

35 U.S.C. § 102 Rejections

Claim 1 has been rejected under 35 U.S.C. § 102(b) as being anticipated by Furuhashi et al. Applicant respectfully traverses this rejection.

Furuhashi et al. discloses is a power supply circuit for boosting drive voltage by a booster circuit, inputting the boosted voltage to the primary side of a piezoelectric transformer, and driving a load with an impedance of large temperature dependency by output voltage generated at the secondary side of the piezoelectric transformer. The circuit has: an excessively-small current detection means that outputs excessively-small current signal when load current flowing through the load is smaller than a predetermined value; a stopping means that stops the operation of the booster circuit when the excessively-small current signal is output; and a delaying means that sets a delay time according to the level of the output voltage. The stopping

means determines the execution or in execution of the operation according to the existence of the excessively-small current signal when the delay time passes.

Applicant submits that Furahashi et al. does not disclose or suggest the limitations in the combination of this claim of, *inter alia*, a feedback control unit for detecting a voltage induced from the high voltage output, for determining based on a level of the induced voltage an abnormal condition of the high voltage output, and for inhibiting the output of the high-voltage generator during a time corresponding to the abnormal condition, wherein the feedback control unit comprises a patterned conductor for conducting the induced voltage to the feedback control unit. The Examiner asserts that Furahashi et al. discloses a feedback control unit in Fig. 14, elements 310, 401, 402, 403, and col. 14, lines 31-42. However, these portions merely disclose that a shut-off circuit 403 converts current I_s from the ON/OFF line 415 into base voltage of the transistor 403a. The transistor 403a turns on when the base voltage becomes higher than a predetermined value, grounding the ON/OFF line through the resistor 414 and the diode 403f. Once the transistor 403a is turned on, its ON state is continuously kept to turn on the transistor 403a. When the ON/OFF line is grounded through the transistor 403a, voltage being applied from the ON/OFF line 415 to the IC lowers. As a result, the supply of power VDD into the IC is stopped and thereby the operation of the piezoelectric transformer 301 is stopped. This is not a feedback control unit for detecting a voltage induced from the high voltage output, for determining based on a level of the induced voltage an abnormal condition of the high voltage

output, and for inhibiting the output of the high-voltage generator during a time corresponding to the abnormal condition, wherein the feedback control unit comprises a patterned conductor for conducting the induced voltage to the feedback control unit, as recited in the claims of the present application. Furahashi et al. merely relates to a shut-off circuit stopping the supply of power into an IC thereby stopping the operation of a piezoelectric transformer when current from the ON/OFF line converted into a base voltage of a transistor turns on the transistor when the base voltage becomes higher than a predetermined value, grounding the ON/OFF line. Furahashi et al. does not disclose or suggest determining based on a level of the induced voltage an abnormal condition of the high voltage output.

Accordingly, Applicant submits that Furahashi et al. does not disclose or suggest the limitations in the combination of claim 1 of the present application. Applicant respectfully requests that this rejection be withdrawn and that this claim be allowed.

35 U.S.C. § 103 Rejections

Claims 2-9, 13 and 14 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Furuhashi et al. in view of Hachisuka et al. Applicant submits that these claims, and new claims 24 and 25, are dependent on independent claim 1 and, therefore, are patentable at least for the same reasons noted previously regarding this independent claim. Applicant submits that Hachisuka does not overcome the substantial defects noted previously regarding Furuhashi et al.

Accordingly, Applicant submits that none of the cited references, taken alone or in any proper combination, disclose suggest or render obvious the limitations in the combination of each of claims 2, 4-9, 13, 14, 24 and 25 of the present application. Applicant respectfully requests that these rejections be withdrawn and that these claims be allowed.

Claim 15 has been rejected under 35 U.S.C. § 103(a) as being unpatentable over Furuhashi et al. in view of Lee et al. Applicant respectfully traverses this rejection.

Lee et al. discloses a backlight luminescence control device for use in a portable computer to control a backlight of a liquid crystal display. When an AC adaptor is not connected to the portable computer, the device senses the voltage level of a DC battery and generates an electrical signal that indicates the status of the battery. From the voltage level of the DC battery, the device ascertains the appropriate luminescence level of a cold-cathode fluorescent backlight lamp (CCFL), automatically controls the brightness of the CCFL through several levels of luminosity, and optimizes the luminescence of the CCFL according to the voltage level available in the DC battery.

Applicant submits that none of the cited references, taken alone or in any proper combination, disclose suggest or render obvious the limitations in the combination of this claim of, *inter alia*, a feedback control unit for detecting a voltage induced from the high voltage output, for determining based on a level of the induced voltage an abnormal condition of the high voltage output, and for inhibiting the output of the high voltage generator during a time

corresponding to the abnormal condition, wherein the feedback control unit comprises a PCB pattern disposed electromagnetically proximate to an electrical output of the high-voltage generator and to an electrical input of the light source unit, for conducting the induced voltage to said feedback control unit. As noted previously, Furuhashi et al. does not disclose or suggest a feedback control unit for detecting a voltage induced from the high voltage output, or for determining based on a level of the induced voltage an abnormal condition of the high voltage output. Moreover, Lee et al. does not overcome the deficiencies of Furuhashi et al. and does not disclose or suggest these limitations in claim 15 of the present application. In addition, neither Furuhashi et al. nor Lee et al. disclose or suggest where the feedback control unit comprises a PCB pattern disposed electromagnetically proximate to an electrical output of the high-voltage generator and to an electrical input of the light source unit, for conducting the induced voltage to the feedback control unit, as recited in the claims of the present application. As noted previously, Furuhashi et al. merely relates to a shut-off circuit stopping the supply of power into an IC thereby stopping the operation of a piezoelectric transformer when current from the ON/OFF line converted into a base voltage of a transistor turns on the transistor when the base voltage becomes higher than a predetermined value, grounding the ON/OFF line. Further, Lee et al. merely relates to controlling a backlight of a liquid crystal display based on a voltage level of a DC battery.

Regarding new claims 22 and 23, Applicant submits that these claims are dependent on independent claim 15 and, therefore, are patentable at least for the same reasons noted previously regarding this independent claim.

Accordingly, Applicant submits that none of the cited references, taken alone or in any proper combination, disclose suggest or render obvious the limitations in the combination of each of claims 15, 22 and 23 of the present application. Applicant respectfully requests that these rejections be withdrawn and that these claims be allowed.

Claim 16 has been rejected under 35 U.S.C. § 103(a) as being unpatentable over Furuhashi et al. in view of Lee et al. and further in view of Hachisuka et al. Applicant submits that this claim is dependent on independent claim 15 and, therefore, is patentable at least for the same reasons noted previously regarding this independent claim. Accordingly, Applicant respectfully requests that this rejection be withdrawn and that this claim be allowed.

New Claims 26 and 27

Regarding claim 26, Applicant submits that none of the cited references, taken alone or in any proper combination, disclose suggest or render obvious the limitations in the combination of new claim 26 for at least reasons similar to those previously mentioned regarding claims 1 and 15. For example, none of the cited references disclose or suggest detecting a voltage induced from the high voltage applied to the light source unit, or determining, based on a level of the

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induced voltage, an abnormal condition of the high voltage output, or inhibiting said high-voltage generation during a time corresponding to the abnormal condition.

Regarding new claim 27, Applicant submits that this claim is dependent on independent claim 26 and, therefore, is patentable at least for the same reasons noted regarding this independent claim.

Accordingly, Applicant submits that none of the cited references, taken alone or in any proper combination, disclose suggest or render obvious the limitations in the combination of each of new claims 26 and 27 of the present application. Applicant respectfully requests that these claims be allowed.

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CONCLUSION

In view of the foregoing amendments and remarks, Applicant submits that claims 1, 2 and 4-27 are now in condition for allowance. Accordingly, early allowance of such claims is respectfully requested. If the Examiner believes that any additional changes would place the application in better condition for allowance, the Examiner is invited to contact the undersigned attorney, Frederick D. Bailey, at the telephone number listed below.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this, concurrent and future replies, including extension of time fees, to Deposit Account 16-0607 and please credit any excess fees to such deposit account.

Respectfully submitted,
FLESHNER & KIM, LLP



Daniel Y.J. Kim
Registration No. 36,186
Frederick D. Bailey
Registration No. 42,282

P.O. Box 221200
Chantilly, Virginia 20153-1200
(703) 766-3701 DYK/FDB:tlg

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Please direct all correspondence to Customer Number 34610